Santa Ana California Regional Water Quality Control Board
Santa Ana Region

August 13, 2004

STAFF REPORT

ITEM NO: 1 4

SUBJECT: GENERAL WASTE DISCHARGE REQUIREMENTS FOR SHORT-TERM GROUNDWATER-RELATED DISCHARGES AND DE MINIMUS WASTEWATER DISCHARGES TO SURFACE WATERS WITHIN THE SAN DIEGO CREEK/NEWPORT BAY WATERSHED, ORDER NO. R8-2004-0021, NPDES NO. CAG998002

DISCUSSION:

See Attached Fact Sheet

RECOMMENDATION:

Adopt Order No. R8-2004-0021, NPDES No. CAG998002 as presented.

Comments were solicited from the following agencies:

U.S. Environmental Protection Agency, Permits Issuance Section (WTR-5) – Doug Eberhardt
U.S. Army District, Los Angeles, Corps of Engineers - Regulatory Branch
U.S. Fish and Wildlife Service, Carlsbad
State Water Resources Control Board, Office of the Chief Counsel - Jorge Leon
State Water Resources Control Board, Division of Water Quality - James Maughan
State Department of Water Resources, Glendale
State Department of Fish and Game, Long Beach
California Department of Health Services, Santa Ana – Cor Shaeffer
Orange County Health Care Agency - Seth Daugherty
Orange County Resources and Development Management Department - Chris Crompton
Orange County Planning & Development Services Department – Tim Neely
Orange County Water District - Nira Yamachika
South Coast Air Quality Management District - Dr. Barry R. Wallerstein, Executive Officer
Orange County Coastkeeper - Garry Brown
Lawyers for Clean Water C/c San Francisco Baykeeper
Current De Minimus enrollees within the San Diego Creek/Newport Bay Watershed, (attached list)

California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3348

FACT SHEET

August 13, 2004

GENERAL WASTE DISCHARGE REQUIREMENTS FOR SHORT-TERM GROUNDWATER-RELATED DISCHARGES AND DE MINIMUS WASTEWATER DISCHARGES TO SURFACE WATERS WITHIN THE SAN DIEGO CREEK/NEWPORT BAY WATERSHED, ORDER NO. R8-2004-0021, NPDES NO. CAG998002

I. BACKGROUND SUMMARY:

Order No. 98-67, NPDES No. CAG998001 is a general NPDES permit adopted by the Regional Board on July 10, 1998, prescribing general waste discharge requirements for discharges to surface waters that pose an insignificant (*de minimus*) threat to water quality within the Santa Ana Region, including the San Diego Creek/Newport Bay watershed. The discharges regulated under this Order include those resulting from hydrostatic testing of vessels, pipelines, and tanks, from the maintenance of potable water supply pipelines, tanks, and reservoirs, from fire hydrant testing or flushing, non-contact cooling water, air conditioning condensate, and the like. Order No. 98-67 also regulated discharges of groundwater resulting from construction dewatering, well installation, development, test pumping and purging, aquifer testing wastes, and dewatering wastes from subterranean seepage.

Order No. 98-67 expired on July 1, 2003 and was renewed by Order No. R8-2003-0061. Order No. R8-2003-0061 specifically excludes from coverage under its terms and conditions the groundwater-related discharges noted above that occur in the San Diego Creek/Newport Bay watershed. Instead, the Order finds that these groundwater-related discharges within the San Diego Creek/Newport Bay watershed will continue to be covered under Order No. 98-67 until such time as appropriate, separate waste discharge requirements are approved. This revised regulatory approach was taken in light of the concern that the groundwater-related discharges in the San Diego Creek/Newport Bay watershed have the potential to adversely affect surface waters within the watershed and would likely not comply with established TMDLs for the watershed. Due principally to the presence of nitrates and selenium, and potentially other pollutants of TMDL concern, the Board found that it would be inappropriate to regulate these groundwater-related wastewater discharges within the San Diego Creek/Newport Bay watershed (i.e., those associated with well installation, development, test pumping and purging, aquifer testing wastes, construction dewatering and wastes from subterranean seepage) as *de minimus* discharges.

The groundwater basin in the San Diego Creek/Newport Bay Watershed consists of a deep regional aquifer overlain by a shallow perched aquifer. The deep aquifer, an important component of the water supply for Orange County, is recharged naturally through infiltration along the flanks of the Santa Ana Mountains, and artificially through actively managed spreading basins along the Santa Ana River. The shallow aquifer is poorly transmissive, restricted in extent, and found largely in the central portion of the watershed in the Tustin Plain. Historically,

this aquifer recharged through local vertical infiltration. Surface runoff in the watershed ponded seasonally in the area known as the Swamp of the Frogs, where shallow groundwater seeped to the surface.

The quality and hydrology of the shallow groundwater was altered by anthropogenic activities beginning in the early part of the 20th century. Irrigated agriculture resulted in leaching of nitrates and other salts to the shallow groundwater. The Swamp of the Frogs was drained and a network of channels was created to convey wastewater to Upper Newport Bay. A large portion of this wastewater consists of "baseflow" (seepage from shallow groundwater). Although seleniferous bedrock and soils occur naturally in parts of the watershed, the drainage modifications in the watershed have resulted in increased selenium mobility. The concentration of selenium in the groundwater of the watershed is not homogeneous and can vary widely depending on specific location within the watershed. Accordingly, the concentration of selenium in groundwater-related discharges in the watershed also varies widely.

In most cases, the groundwater-related discharges within the San Diego Creek/Newport Bay watershed are short-term in nature, i.e., the discharges occur for one year or (frequently) less. In some instances, however, these discharges are expected to occur over many years, even if intermittently during this extended period. For example, long-term dewatering is or may be necessary in some cases to prevent flooding of railroad or road crossings. This Order specifies waste discharge requirements for short-term (i.e., one year or less) groundwater-related discharges and for *de minimus* discharges within the San Diego Creek/Newport Bay watershed. Individual discharge requirements will be developed for Regional Board consideration for the long-term groundwater-related discharges within the San Diego Creek/Newport Bay watershed.

This Order specifies limitations necessary to implement the Basin Plan and TMDLs established by the Regional Board and the U.S. Environmental Protection Agency.

II. NEED FOR ISSUANCE OF GENERAL WASTE DISCHARGE REQUIREMENTS:

It is appropriate to adopt a separate general discharge permit that will cover the following types of discharges in the Newport Bay Watershed:

1. Short term (one year or less duration) discharges from activities involving groundwater extraction and discharge:
    a. Wastes associated with well installation, development, test pumping and purging;
    b. Aquifer testing wastes;
    c. Dewatering wastes from subterranean seepage; and
    d. Groundwater dewatering wastes at construction sites.

2. Discharges that pose an insignificant threat to water quality:
    a. Construction dewatering wastes not involving groundwater (except storm water dewatering at construction sites)[1];

[1] *Storm water discharges are covered under separate permit.*

b. Discharges resulting from hydrostatic testing of vessels, pipelines, tanks, etc.;

c. Discharges resulting from the maintenance of potable water supply pipelines, tanks, reservoirs, etc.;

d. Discharges resulting from the disinfection of potable water supply pipelines, tanks, reservoirs, etc.;

e. Discharges from potable water supply systems resulting from system failures, pressure releases, etc.;

f. Discharges from fire hydrant testing or flushing;

g. Non-contact cooling water;

h. Air conditioning condensate;

i. Swimming pool drainage;

j. Discharges resulting from diverted stream flows; and

k. Other similar types of wastes, which pose a *de minimus* threat to water quality, yet technically must be regulated under waste discharge requirements.

It is anticipated that the current enrolled dischargers (approximately 12) within the San Diego Creek/Newport Bay Watershed will submit renewal applications for continued discharges. Given the rapid pace of development in the watershed, it is likely that additional discharges will be proposed, requiring regulatory coverage. The issuance of a general permit will facilitate the processing of permit applications and make the most efficient use of Regional Board staff resources.

III. GENERAL NPDES PERMIT:

The issuance of general permits is authorized at 40 CFR[2] 122.28. This section of the regulations provides for the issuance of general permits to regulate discharges of wastes that result from similar operations, are the same types of wastes, require the same effluent limitations, require similar monitoring, and are more appropriately regulated under a general permit than under individual permits. The discharges listed above meet the requirements of 40 CFR 122.28.

The United States Environmental Protection Agency, Region IX, granted authority to the State of California to issue general permits pursuant to 40 CFR 122.28 on September 22, 1989.

IV. REGULATORY BASIS FOR WASTE DISCHARGE REQUIREMENTS:

This Order includes requirements that implement the Water Quality Control Plan (Basin Plan), which was adopted by the Regional Board on March 11, 1994. The Basin Plan became effective on January 24, 1995. This Plan specifies water quality objectives and beneficial uses for the waters of the Santa Ana Region.

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2 *Code of Federal regulations*

The proposed Order specifies numeric and narrative limits for the control of toxic substances. These limits implement relevant Basin Plan objectives, including objectives specified in the California Toxics Rule, and other state and federal requirements. These limits are based on the following.

1. 1995 Basin Plan
2. Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California adopted on March 2, 2000 by the State Water Resources Control Board (hereinafter, "Policy")
3. Code of Federal Regulations (40 CFR Parts 122-124, 129, 131, 136, 141 and 142)
4. Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California, promulgated on May 18, 2000 by the U.S. EPA ("California Toxics Rule").
5. Technical Support Document for Water Quality-based Toxics Control (EPA/505/2-90-001, March 1991)
6. US Environmental Protection Agency, Region IX, Total Maximum Daily Loads (TMDL) for Toxic Pollutants for San Diego Creek and Newport Bay, promulgated on June 14, 2002.

In 1998, the Regional Board adopted Basin Plan amendments incorporating nutrient and sediment TMDLs for the San Diego Creek/Newport Bay Watershed (Resolutions No. 98-9 and 98-69, respectively). These TMDLs were subsequently amended (Resolutions No. 98-100 and 101, respectively). These TMDLs specify certain load allocations for discharges of nutrients and sediments into San Diego Creek and Newport Bay.

The nutrient TMDL specifies load allocations for total nitrogen inputs from "Undefined Sources" to the Newport Bay watershed and to San Diego Creek, Reach 2 (upstream of Jeffrey Road) during non-storm conditions. "Undefined Sources" include discharges from dewatering discharges in the watershed (as well as rising groundwater, atmospheric deposition, groundwater cleanup projects, and other sources)[3]. These load allocations require reductions of total nitrogen inputs from these Undefined Sources over time. For the watershed, the TMDL requires a 50% reduction in summer (April – September) inputs by 2007. A 50% reduction in wintertime inputs (October – March) is to be achieved by 2012. For San Diego Creek, Reach 2 (non-storm conditions), more significant reductions are necessary to assure that the total nitrogen inputs do not cause violation of the Basin Plan water quality objective for that Reach. For this Reach of San Diego Creek, total nitrogen discharges from nurseries, agriculture and "Undefined Sources" are not to exceed 8.5 lbs./day by 2012. The TMDL stipulates that compliance with all the requisite reductions is to be achieved no later than the dates specified, and that the Regional Board may require earlier compliance where it is feasible and reasonable.

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[3] *Load allocations for both total nitrogen and phosphorus are specified in the TMDL. The phosphorus load allocations are assigned to open space and agricultural areas. No phosphorus load allocations are specified for groundwater related discharges since these discharges are not expected to include phosphorus.*

There is an ongoing effort by watershed stakeholders to design and implement a regional program to achieve the total nitrogen reductions required by the TMDL. Implementation of this program, with participation by dischargers, would likely enable the dischargers to achieve the requisite total nitrogen reductions. This Order requires each discharger to the Newport Bay/San Diego Creek watershed wishing to discharge groundwater-related wastewater (i.e., discharges resulting from construction dewatering, well installation, development, test pumping and purging, aquifer testing wastes, and dewatering wastes from subterranean seepage) under this general permit to achieve a 50% reduction in the total nitrogen mass of their discharges. This Order also requires compliance with nitrogen concentration limits based on Basin Plan objectives established for San Diego Creek. The more stringent of the requirements governs the discharge. In the event that the 50% reduction in the total nitrogen mass of the discharge or compliance with the nitrogen concentration limitations specified in this Order, whichever is applicable to the discharge, cannot be achieved immediately, the discharger is required to submit a plan for approval by the Regional Board's Executive Officer that identifies the method(s) and schedule by which the discharger proposes to provide a total nitrogen offset that would address nitrogen discharges in excess of those that would have been allowed had the 50% reduction been achieved or had compliance with the applicable nitrogen limits specified in the Order been achieved, whichever is more stringent. The schedule is to reflect the shortest practical time necessary to achieve the 50 % reduction, but in no case extend beyond January 1, 2007. The discharger is required to implement the offset plan upon the Executive Officer's approval. It is recognized that the offset may not be completed within the time frame of the actual discharge. In filing a Notice of Intent to obtain authorization to discharge under this Order, the discharger will be required to acknowledge explicitly that no notice of termination will be issued and that compliance with this Order will continue to be required and enforced until such time as the offset is satisfactorily completed.

On June 14, 2002, the U.S. EPA Region 9 established a total maximum daily load (TMDL) for selenium for San Diego Creek and Newport Bay. EPA also established TMDLs for other toxic pollutants in the watershed. The selenium TMDL is based on the selenium criterion specified in the CTR. The EPA TMDLs do not include specific implementation requirements, such as compliance timeframes, interim numeric targets, etc, since implementation plans are the responsibility of the Regional Board. However, pursuant to federal regulations, the Regional Board is required to ensure that NPDES permits for discharges in this watershed contain effluent limitations necessary to be consistent with the wasteload allocations specified in the selenium TMDL (and other TMDLs). In the absence of an adopted implementation plan, the Regional Board can and must employ its legally authorized discretion in determining the appropriate permit provisions to implement these allocations.

Regional Board staff is now working on an implementation plan for the selenium TMDL, which will be considered for future adoption as a Basin Plan amendment. Staff may also recommend revisions to the selenium TMDL established by EPA based on ongoing studies by EPA, Board staff and others. In its documents establishing the toxic TMDLs, EPA recognizes the substantial uncertainties that remain concerning selenium sources, biological effects, and the appropriate numeric objective that should apply to the protection of beneficial uses. EPA is now engaged in a review of the selenium objective in the CTR. Resolution of these uncertainties, and possible revision of the numeric selenium objective, is likely to require future refinement of the selenium TMDL. Any such refinement would necessitate review and revision, as appropriate, of this Order.

This Order implements relevant provisions of the CTR, the EPA selenium TMDL for San Diego Creek and Newport Bay, and the State Board Policy by specifying appropriate effluent limitations for selenium for short-term groundwater-related discharges. In some cases, where selenium concentrations in groundwater are low, immediate compliance with the selenium effluent limitations for groundwater-related discharges can be achieved. However, where selenium concentrations in the groundwater are elevated, immediate compliance may be infeasible, given that there is uncertainty regarding the availability of effective and practicable selenium treatment technology. Moreover, it may not be practical to implement such technology, if and when it becomes available, for the short-term groundwater discharges.

Both the CTR and the State Policy include provisions for compliance schedules for effluent limitations for selenium and other priority pollutants. The maximum schedule that could be allowed pursuant to the CTR is five years from the date of adoption of these waste discharge requirements. Were a schedule for compliance with the final limitations to be specified, interim selenium limits would be specified. However, given the short-term nature of the groundwater-related discharges addressed by this Order, it is not sensible to include either interim limits or a schedule for compliance with final limits because the discharges are expected to be complete before compliance could be achieved. Accordingly, this Order adopts the following regulatory approach. First, all new groundwater-related dischargers are required to evaluate the selenium concentration in their potential discharges to determine whether immediate compliance with the effluent limitations specified in this Order can be achieved. If compliance is feasible, the discharge can proceed in accordance with the remaining terms and conditions of this Order. If compliance with the selenium limitations is infeasible, then the discharger must demonstrate that it is not possible to reduce or eliminate the discharge to surface waters. If it is demonstrated that it is infeasible to reduce or eliminate the discharge, then the discharger must either (a) not commence the discharge, or (b) the discharger must identify and participate in a program that assures that selenium discharges in excess of those allowed pursuant to the effluent limitations are offset on at least a one-to-one basis. The offset would assure that there is no net loading of selenium to surface waters within the San Diego Creek/Newport Bay watershed. The discharger is required to identify a plan and schedule for implementation of the offset prior to commencing any new discharge. The plan/ schedule is to reflect the shortest practicable time necessary to provide the offset. In no case shall the schedule exceed five years from the date of adoption of this Order. The discharger is required to implement that plan and schedule upon approval by the Executive Officer. Again, it is recognized that the offset may not be completed within the time frame of the actual discharge. In filing a Notice of Intent to obtain authorization to discharge under this Order, the discharger will be required to acknowledge explicitly that no notice of termination will be issued and that compliance with this Order will continue to be required and enforced until such time as the offset is satisfactorily completed. In the case of discharges that have already commenced, pursuant to the terms and conditions of Order No. 98-67, that do not comply with the selenium limitations in this Order and that cannot reasonably be terminated, the discharger must submit a plan and schedule for implementation of an offset within 120 days of the effective date of this Order. The plan/schedule is to reflect the shortest practicable time necessary to provide the offset. In no case shall the schedule exceed five years from the date of adoption of this Order. The discharger must implement that plan upon approval by the Executive Officer. Pending development, approval and implementation of the offset plan, the discharger must collect data on flow and selenium quality to assure that ongoing selenium discharges are properly accounted for and offset. Again, it is recognized that the offset may not

be completed within the time frame of the actual discharge. No notice of termination will be issued until such time as the offset is satisfactorily completed.

Stakeholders within the watershed are cognizant of the selenium problem and are working to identify potential mechanisms whereby it can be addressed. This includes the development and evaluation of subsurface selenium treatment wetlands, and the possible construction of a brine line that could carry selenium-laden wastewater out of the watershed. Dischargers needing to provide a selenium offset may propose to participate in one or more of these efforts. If successfully implemented, these mechanisms would provide a suitable offset.

Generally, there is no significant amount of receiving water at the point of discharge. Therefore, no mixing zone allowance is included in the calculation of effluent limits. Consequently, compliance with the effluent limits is required to be determined at the end of the discharge pipe or at a location prior to where the discharge enters the receiving water. If the discharger requests that a mixing zone allowance be included in the determination of appropriate effluent limits, consideration of an individual permit will be required.

Monitoring is the primary means of ensuring that waste discharge requirements are met. It is also the basis for enforcement actions against dischargers who are in violation of the waste discharge requirements issued by the Regional Board. All dischargers enrolled under this general permit will be required to conduct monitoring in accordance with a monitoring program issued by the Executive Officer. Each monitoring and reporting program will be customized for each enrollee based on the characteristics of the wastewater discharged. The typical required constituents and frequency of analyses are tabulated in the self-monitoring program attached to this general permit as "Typical Monitoring and Reporting Program (MR&P) No. R8-2004-0021." This monitoring and reporting program will be revised as appropriate. An increase of the parameters or frequency of monitoring will be required when monitoring data show the presence of other pollutants of concern that are not limited in this Order.

V. APPLICATION FOR COVERAGE UNDER THE GENERAL PERMIT:

This Order requires those dischargers already covered under the General Permit Order No. 98-67 and those dischargers currently regulated under individual permits who wish to be and believe they can and should be covered under this general permit to submit a completed Notice of Intent Form (see Attachment B of Order No. R8-2004-0021). The Executive Officer may require the discharger to submit additional information about any recent change in ownership of the facility, changes in the character and treatment of the discharges and any other relevant information that will update the facility information that is in the Regional Board's files. Where characterization of short-term groundwater-related discharges demonstrates that compliance with the selenium limitations of this Order cannot be achieved, the discharger is required to (a) cease the discharge to surface waters or (b) demonstrate that termination/reduction of the discharge to surface waters is infeasible. If the discharger demonstrates to the Executive Officer's satisfaction that the discharge to surface waters cannot be terminated, then, within 120 days of submittal of the NOI, the discharger shall submit for approval by the Executive Officer a proposed plan and schedule to provide an offset of selenium discharges in excess of those allowed by the effluent limitations specified in this Order.

This Order requires each new discharger[4] to submit an application for the proposed discharge to the Executive Officer. The application for the proposed discharge will require the first annual fee and, at the minimum, the following information:

1. Notice of Intent Form (see Attachment B of Order No. R8-2004-0021) for coverage under this general permit.

2. A report which shall include the following:

   a. Characterization of the proposed wastewater discharge;
   b. The estimated average and maximum daily flow rates;
   c. The frequency and duration of the discharge;
   d. A description of the proposed treatment system (if appropriate); and
   e. A map showing the path from the point of initial discharge to the receiving water.

3. Any other information deemed necessary by the Executive Officer. Where characterization of the potential discharge demonstrates that compliance with the selenium limitations of this Order is infeasible, the discharger shall submit prior to the initiation of the discharge to surface waters (1) a demonstration that elimination/reduction of the proposed discharge to surface waters is infeasible and (2) a proposed plan and schedule for approval by the Executive Officer to offset selenium discharges in excess of those allowed by the effluent limitations specified in this Order.

For both existing and new short-term groundwater-related discharges, the NOI will include explicit acknowledgement by the discharger that satisfactory completion of requisite total nitrogen and selenium offsets is necessary to obtain a notice of termination.

VI. DISCHARGE AUTHORIZATION:

A. <u>Dischargers currently regulated under the General Permit Order No. 98-67 or Individual Waste Discharge Requirements</u>

For dischargers currently regulated under the General Permit or Individual Waste Discharge Requirements within the San Diego Creek/Newport Bay Watershed, submittal of a completed Notice of Intent form and requisite supplemental information, as defined above, will assure coverage under this General Permit, except where the review of additional information/individual permits indicates that coverage under this Permit is not appropriate. In such cases, the discharge proponent will be required to obtain/maintain an individual NPDES permit prior to any discharge to surface waters.

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4 *A new discharger is an entity/individual who is not currently authorized to discharge waste under Order No. 98-67 and who is seeking coverage under this general permit for proposed de minimus and/or groundwater-related discharges within the San Diego Creek/Newport Bay Watershed.*

B. For New Dischargers

Upon receipt of a complete application for a proposed discharge, the Executive Officer will review the application to determine whether the proposed discharger has demonstrated that it will comply with the following criteria and is eligible to discharge wastes under this Order:

1. The proposed discharge results from those discharges identified in Section II.

2. The proposed discharge is to surface waters within the San Diego Creek/Newport Bay Watershed;

3. The proposed treatment system and associated operation, maintenance, and monitoring plans, including any requisite total nitrogen and selenium offset plans, are capable of ensuring that the discharge will meet the waste discharge requirements of this Order;

4. The proposed discharge will not have any adverse impact on waters of the State.

Upon determination by the Executive Officer that the proposed discharge satisfies the requirements of this general permit, the Executive Officer may either:

1. Authorize the proposed discharge by transmitting a discharge authorization letter to the discharge proponent (thereupon an "authorized discharger" or "enrollee"), authorizing the initiation of the discharge subject to the conditions of this general permit and any other conditions necessary to protect the beneficial uses of waters within the Santa Ana Region. The discharge authorization letter will also transmit a self-monitoring program. The discharge authorization letter may be terminated or revised by the Executive Officer at any time. The Executive Officer will submit a copy of the discharge authorization letter to the State Water Resources Control Board and the EPA. A list of the discharge authorization letters that have been issued will be reported in the Board's meeting agenda; or

2. Require the discharge proponent to obtain an individual NPDES permit prior to any discharge to surface waters in the Santa Ana Region.

If an individual NPDES permit has not been issued and the Executive Officer does not provide written authorization for the initiation of the Discharge under the terms and conditions of this general permit, no discharge of waste to surface waters within the Santa Ana Region (San Diego Creek/Newport Bay Watershed) is permitted.

VII. EXPIRATION DATE:

The proposed Order expires on August 1, 2009.

VIII. ANTIDEGRADATION ANALYSIS:

The Regional Board has considered antidegradation pursuant to 40 CFR 131.12 and State Board Resolution No. 68-16. The water quality of the receiving waters is not expected to degrade as a result of discharges in compliance with those waste discharge requirements. Neither the volume of the discharge nor the mass loading of pollutants associated with the discharges will adversely impact the receiving waters. Therefore, these waste discharge requirements are consistent with federal and state antidegradation policies.

IX. WRITTEN COMMENTS:

Interested persons are invited to submit written comments on the proposed discharge limits and the Fact Sheet. Comments should be submitted by July 26, 2004, either in person or by mail to:

Jun Martirez
California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3348

X. INFORMATION AND COPYING:

Persons wishing further information may write to the above address or call Jun Martirez of the Regional Board at (909) 782-3258. Copies of the application, proposed waste discharge requirements, Fact Sheet, and other documents (other than those which the Executive Officer maintains as confidential) are available at the Regional Board office for inspection and copying between the hours of 9:00 a.m. and 3:00 p.m., Monday through Friday (excluding holidays).

XI. REGISTER OF INTERESTED PERSONS:

Any person interested in a particular application or group of applications may leave his/her name, address, and phone number as part of the file for an application.

XII. PUBLIC HEARING:

The Regional Board will hold a public hearing regarding the proposed waste discharge requirements as follows:

DATE:	August 13, 2004
TIME:	9:00 a.m.
PLACE:	Santa Ana City Council Chambers 22 Civic Center Plaza Santa Ana, California

California Regional Water Quality Control Board
Santa Ana Region

ORDER NO. R8-2004-0021
NPDES NO. CAG998002

GENERAL WASTE DISCHARGE REQUIREMENTS FOR SHORT-TERM GROUNDWATER-RELATED DISCHARGES AND DE MINIMUS WASTEWATER DISCHARGES TO SURFACE WATERS WITHIN THE SAN DIEGO CREEK/NEWPORT BAY WATERSHED

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter Board), finds that:

1. On July 10, 1998, the Regional Board adopted Order No. 98-67, National Pollutant Discharge Elimination System (NPDES) Permit No. CAG998001. Order No. 98-67 specified waste discharge requirements for discharges into surface waters of various types of waste that pose an insignificant threat to water quality. The types of discharges regulated under Order No. 98-67 include:

   a. Construction dewatering wastes;
   b. Wastes associated with well installation, development, test pumping and purging;
   c. Aquifer testing wastes;
   d. Dewatering wastes from subterranean seepage, except for discharges from utility company vaults;
   e. Discharges resulting from hydrostatic testing of vessels, pipelines, tanks, etc.;
   f. Discharges resulting from the maintenance of potable water supply pipelines, tanks, reservoirs, etc.;
   g. Discharges resulting from the disinfection of potable water supply pipelines, tanks, reservoirs, etc.;
   h. Discharges from potable water supply systems resulting from system failures, pressure releases, etc.;
   i. Discharges from fire hydrant testing or flushing;
   j. Non-contact cooling water;
   k. Air conditioning condensate;
   l. Swimming pool drainage;
   m. Discharges resulting from diverted stream flows; and
   n. Other similar types of wastes, which pose a de minimus threat to water quality, yet technically must be regulated under waste discharge requirements.

2. On June 14, 2002, the US Environmental Protection Agency (hereinafter EPA) Region IX, promulgated Total Maximum Daily Loads (TMDLs) for Toxic Pollutants for San Diego Creek and Newport Bay (see Attachment "A" for San Diego Creek/Newport Bay Watershed Map). These include a TMDL for selenium. In 1998, the Regional Board adopted a Basin Plan amendment, Resolution No. 98-9 (amended by Resolution No. 98-100), incorporating nutrient TMDLs for the San Diego Creek/Newport Bay Watershed. These TMDLs specify certain load allocations for discharges of nutrients and toxic pollutants into San Diego Creek and Newport Bay.

3. Recent investigations into the sources of selenium and nutrients in the watershed have found that approximately 62-87 percent (%) of the base flows in San Diego Creek result from groundwater discharge to the creek, either naturally through subsurface flow, springs, and weepholes, or through groundwater dewatering and remediation operations. Approximately 96% of the selenium and 85% of the nitrate concentrations found in San Diego Creek and its tributaries result from these groundwater inputs.

4. Order No. 98-67 expired on July 1, 2003 and was renewed by Order No. R8-2003-0061 on August 22, 2003. Order No. R8-2003-0061 specifically excludes groundwater-related discharges (1.a.-1.d., above) in the San Diego Creek/Newport Bay watershed from coverage under its terms and conditions. Instead, Order No. R8-2003-0061 finds that these groundwater-related discharges within the San Diego Creek/Newport Bay watershed will continue to be regulated under Order No. 98-67 until such time as appropriate, separate waste discharge requirements are approved. This revised regulatory approach was taken in light of the concern that the groundwater-related discharges in the San Diego Creek/Newport Bay watershed have the potential to adversely affect surface waters within the watershed and would likely not comply with established TMDLs (see Finding No. 3). Due principally to the presence of nitrates and selenium, and potentially other pollutants of TMDL concern, the Board found that it would be inappropriate to regulate these groundwater-related wastewater discharges within the San Diego Creek/Newport Bay watershed (i.e., those associated with well installation, development, test pumping and purging, aquifer testing wastes, construction dewatering and wastes from subterranean seepage) as *de minimus* discharges.

5. In some cases, the groundwater-related discharges within the San Diego Creek/Newport Bay watershed are short-term in nature, i.e., the discharges occur for one year or (frequently) less. In other instances, however, these discharges are expected to occur over many years, even if intermittently during this extended period. For example, long-term dewatering is or may be necessary in some cases to prevent flooding of railroad or road crossings. This Order specifies waste discharge requirements for short-term (i.e., one year or less) groundwater-related discharges within the San Diego Creek/Newport Bay watershed. Individual waste discharge requirements will be developed for Regional Board consideration for the long-term groundwater-related discharges within the San Diego Creek/Newport Bay watershed.

6. Adoption of this general permit is necessary to assure proper regulatory oversight of short-term, groundwater-related discharges within the San Diego Creek/Newport Bay watershed. As a matter of regulatory streamlining, this permit will also regulate *de minimus* discharges within the San Diego Creek/Newport Bay watershed in lieu of coverage of these discharges under Order No. R8-2003-0061. In summary, this general permit will cover the following types of discharges in the watershed:

   a. Short-term (one year or less duration) discharges from activities involving groundwater extraction and discharge:

      (1) Wastes associated with well installation, development, test pumping and purging;
      (2) Aquifer testing wastes;

(3) Dewatering wastes from subterranean seepage; and
(4) Groundwater dewatering wastes at construction sites.

b. Discharges that pose an insignificant threat to water quality:

(1) Construction dewatering wastes not involving groundwater (except storm water dewatering at construction sites)[1];
(2) Discharges resulting from hydrostatic testing of vessels, pipelines, tanks, etc.;
(3) Discharges resulting from the maintenance of potable water supply pipelines, tanks, reservoirs, etc.;
(4) Discharges resulting from the disinfection of potable water supply pipelines, tanks, reservoirs, etc.;
(5) Discharges from potable water supply systems resulting from system failures, pressure releases, etc.;
(6) Discharges from fire hydrant testing or flushing;
(7) Non-contact cooling water;
(8) Air conditioning condensate;
(9) Swimming pool drainage;
(10) Discharges resulting from diverted stream flows; and
(11) Other similar types of wastes, which pose a *de minimus* threat to water quality, yet technically must be regulated under waste discharge requirements.

7. This Order complies with all the criteria cited in 40 CFR[2] 122.28 and as such, is classified as a General NPDES Permit. 40 CFR 122.28 pertains to the issuance of general permits to regulate discharges of waste that meet the following criteria:

a. Involve the same or substantially similar types of operations;
b. Are of the same types;
c. Require the same effluent limitations or operating conditions;
d. Require the same or similar monitoring; and
e. Are more appropriately regulated under a general permit rather than individual permits.

8. This Order will expedite the processing of applications for waste discharge requirements. The general NPDES permit approach has allowed the Regional Board to better utilize limited staff resources.

9. A Water Quality Control Plan (Basin Plan) became effective on January 24, 1995. The Basin Plan contains beneficial uses and water quality objectives for waters in the Santa Ana Region.

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1 *Storm water discharges are covered under separate permit.*

2 *CFR is the Code of Federal Regulations.*

10. The existing and potential beneficial uses of Newport Bay and San Diego Creek include:

    a. Navigation,
    b. Water Contact Recreation,
    c. Non-contact Water Recreation,
    d. Commercial and Sportfishing,
    e. Preservation of Biological Habitats of Special Significance,
    f. Wildlife Habitat,
    g. Rare, Threatened or Endangered Species,
    h. Spawning, Reproduction, and Development,
    i. Marine Habitat,
    j. Shellfish Harvesting,
    k. Estuarine Habitat,
    l. Warm Freshwater Habitat, and
    m. Groundwater Recharge (intermittent beneficial use).

11. Many surface waters within the region recharge underlying groundwater basins. The existing and potential beneficial uses of groundwater within the Newport Bay/San Diego Creek Watershed include:

    a. Municipal and Domestic Supply,
    b. Agricultural Supply,
    c. Industrial Service Supply, and
    d. Industrial Process Supply.

12. Effluent limitations and national standards of performance established pursuant to Section 301, 302, 303(d), 304, 306, and 307 of the Federal Clean Water Act and amendments thereto are applicable to this type of discharges.

13. On June 8, 1989, pursuant to 40 CFR 122.28, the State Water Resources Control Board (hereinafter State Board), applied to the EPA for revisions of its NPDES program in accordance with 40 CFR 123.62 and 403.10. The application included a request to add general permit authority to its approved NPDES program. On September 22, 1989, Region IX EPA approved the State Board's request and granted authorization for the State's issuance of general NPDES permits.

14. On April 17, 1998, the Regional Board adopted Resolution No. 98-9, amending the Basin Plan for the Santa Ana River Basin to incorporate a Nutrient Total Maximum Daily Load (TMDL) for the Newport Bay/ San Diego Creek Watershed. The TMDL was amended by Resolution No. 98-100 on October 9, 1998 and thereafter approved by the State Water Resources Control Board, Office of Administrative Law and the US EPA.

15. The nutrient TMDL specifies load allocations for total nitrogen mass inputs to the San Diego Creek/Newport Bay watershed from "undefined sources", which include groundwater-related discharges. The load allocations require a 50% reduction in summer (April-September) inputs by 2007, and a 50% reduction in winter inputs (October – March) by 2012. The TMDL specifies that the Regional Board may require earlier compliance where it is feasible and reasonable. There is an ongoing effort by watershed stakeholders to design and implement a regional program to achieve the nitrogen reductions required by the TMDL (natural treatment systems and San Diego Creek diversion project). Implementation of this program, with participation by the groundwater dischargers, would likely enable the dischargers to achieve the requisite nitrogen mass reductions. Therefore, it is feasible and reasonable to require the early implementation of the requisite 50% reduction in total nitrogen mass inputs from groundwater-related discharges in the watershed. The dischargers may elect to implement other strategies, e.g., additional treatment systems, to achieve the 50% reduction.

16. The nutrient TMDL specifies that waste discharge requirements shall be established or revised for those discharges within the San Diego Creek/Newport Bay watershed that exceed 1 mg/L TIN. In accordance with this requirement, this Order requires each groundwater discharger within the San Diego Creek/Newport Bay watershed of the type listed in Finding 6.a.(1)-(4) and with discharge concentrations in excess of 1mg/L TIN, to achieve a 50% reduction in the total nitrogen mass inputs from their discharge[3]. This Order also requires compliance with nitrogen concentration limits based on Basin Plan objectives established for San Diego Creek. The more stringent of the requirements governs the discharge. If immediate compliance with the 50% reduction requirement or with the nitrogen concentration limits in this Order, whichever applies to the discharge, is infeasible, the dischargers are required to submit plans and schedules to provide total nitrogen offsets that would address nitrogen discharges in excess of those that would have been allowed had the 50% reduction been achieved or had compliance with the applicable nitrogen limits specified in the Order been achieved, whichever is more stringent. The schedule is to reflect the shortest practical time necessary to provide the offset, but in no case extend beyond January 1, 2007[4]. The offset plan is to be implemented upon the Executive Officer's approval. It is recognized that the offset may not be completed within the time frame of the actual groundwater-related discharge. In filing a Notice of Intent to obtain authorization to discharge under this Order, the discharger will be required to acknowledge explicitly that no notice of termination will be issued and that compliance with this Order will continue to be required and enforced until such time as the offset is satisfactorily completed.

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3 *Any treatment system implemented to achieve this reduction must demonstrate a 50-percent reduction in nitrogen mass when compared to the influent.*

4 *Load allocations for both total nitrogen and phosphorus are specified in the TMDL. The phosphorus load allocations are assigned to open space and agricultural areas. No phosphorus load allocations are specified for groundwater-related discharges since these discharges are not expected to include phosphorus.*

17. On May 18, 2000, the EPA issued a final rule for the establishment of Numeric Criteria for Priority Toxic Pollutants necessary to fulfill the requirements of Section 303(c)(2)(B) of the Clean Water Act for the State of California. This rule is commonly referred to as the California Toxics Rule (CTR).

18. On March 2, 2000, the State Water Resources Control Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (the Policy). This Policy includes implementation provisions for the CTR. The Policy specifies a methodology to determine if pollutants in the discharge are at a level that will cause, have the reasonable potential to cause, or contribute to an excursion of a water quality standard. Effluent limitations must be specified for those pollutants determined to have such reasonable potential. Selenium in the groundwater-related discharges regulated under this Order has the reasonable potential to cause excursions of water quality standards. Thus, effluent limitations for this constituent are specified in this Order. The selenium limitations were derived in accordance with the procedures specified in the Policy for calculating appropriate limits. This Policy also includes compliance schedule provisions for effluent limitations that implement the CTR.

19. On June 14, 2002, the U.S. EPA Region 9 established total maximum daily loads (TMDLs) for selenium and other toxic pollutants for San Diego Creek and Newport Bay.

20. The EPA TMDLs do not include specific implementation requirements, such as compliance timeframes, interim numeric targets, etc, since implementation plans are the responsibility of the Regional Board. However, pursuant to federal regulations, the Regional Board is required to ensure that NPDES permits for discharges in this watershed contain effluent limitations necessary to be consistent with the wasteload allocations specified in the TMDLs. In the absence of an adopted implementation plan, the Regional Board can and must employ its legally authorized discretion in determining the appropriate permit provisions to implement these allocations.

21. Regional Board staff is now working on an implementation plan for the selenium TMDL (and for the other toxic substance TMDLs), which will be considered for future adoption by the Regional Board as a Basin Plan amendment. Staff may also recommend revisions to the selenium TMDL established by EPA based on ongoing studies by EPA, Board staff and others. In its documents establishing the toxic TMDLs, EPA recognizes the substantial uncertainties that remain concerning selenium sources, biological effects, and the appropriate numeric objective that should apply to the protection of beneficial uses. EPA is now engaged in a review of the selenium objective in the CTR. Resolution of these uncertainties, and possible revision of the numeric selenium objective, is likely to require future refinement of the selenium TMDL. Any such refinement would necessitate review of this Order and revision, as appropriate.

22. This Order implements relevant provisions of the CTR, the EPA selenium TMDL for San Diego Creek and Newport Bay, and the State Board Policy by specifying appropriate effluent limitations for selenium for short-term groundwater-related discharges. In some cases, where selenium concentrations in groundwater are low, immediate compliance with the selenium effluent limitations for groundwater-related discharges can be achieved. However, where selenium concentrations in the groundwater are elevated, immediate compliance may be infeasible, given that there is uncertainty regarding the availability of effective and practicable selenium treatment technology. Moreover, it may not be practical to implement such technology, if and when it becomes available, for the short-term groundwater discharges. Dischargers may be able to reduce or even eliminate selenium discharges by the implementation of short-term measures, such as sewering all or part of the groundwater discharges, subject to approval and acceptance by the sewering agency. Re-injection may be another discharge alternative.

23. Both the CTR and the State Policy include provisions for compliance schedules for effluent limitations for selenium and other priority pollutants. The maximum schedule that could be allowed pursuant to the CTR is five years from the date of adoption of these waste discharge requirements. However, given the short-term nature of the groundwater-related discharges addressed by this Order, it is not sensible to include such a compliance schedule: the discharges are expected to be complete before compliance could be achieved. Accordingly, this Order adopts the following regulatory approach. First, all new groundwater-related dischargers are required to evaluate the selenium concentration in their potential discharges to determine whether immediate compliance with the effluent limitations specified in this Order can be achieved. If compliance is feasible, the discharge can proceed in accordance with the remaining terms and conditions of this Order. If compliance with the selenium limitations is infeasible, then the discharger must demonstrate that it is not reasonably possible to reduce or eliminate the discharge to surface waters. If it is demonstrated that it is not reasonably feasible to reduce or eliminate the discharge, then the discharger must either (a) not commence the discharge, or (b) the discharger must identify and participate in a program that assures that selenium discharges in excess of those allowed pursuant to the effluent limitations will be offset on at least a one-to-one basis, or as determined by the Regional Board's Executive Officer. The offset would assure that there is no net loading of selenium to surface waters within the San Diego Creek/Newport Bay watershed. The discharger is required to identify a plan and schedule for implementation of the offset prior to commencing any new discharge. The discharger is required to implement that plan and schedule upon approval by the Executive Officer. It is recognized that the offset may not be completed within the time frame of the actual discharge. In filing a Notice of Intent to obtain authorization to discharge under this Order, the discharger will be required to acknowledge explicitly that no notice of termination will be issued and that compliance with this Order will continue to be required and enforced until such time as the offset is satisfactorily completed.

24. In the case of discharges that have already commenced, pursuant to the terms and conditions of Order No. 98-67, that do not comply with the selenium limitations in this Order, and that cannot reasonably be terminated, the discharger must submit a plan and schedule for implementation of an offset within 120 days of the effective date of this Order. The plan/ schedule is to reflect the shortest practicable time necessary to provide the offset. In no case shall the schedule exceed five years from the date of adoption of this Order. The discharger must implement that plan upon approval by the Executive Officer. Pending development, approval and implementation of the offset plan, the discharger must collect data on flow and selenium quality to assure that ongoing selenium discharges are properly accounted for and offset. Again, it is recognized that the offset may not be completed within the time frame of the actual discharge. No notice of termination will be issued until such time as the offset is satisfactorily completed.

25. Recognizing the uncertainties that pertain to selenium (Finding 21), it may be appropriate to revise approved selenium offset plans (that have not been implemented and completed) based on revised selenium criteria and/or refinement of the selenium TMDL.

26. The Board has considered the effects on the receiving waters (Peters Canyon Wash, San Diego Creek, Newport Bay) of the proposed discharges to be regulated under this Order. If conducted in accordance with the terms and conditions of this Order, the discharges will not result in a lowering of the water quality of the affected receiving waters. Therefore, an antidegradation analysis is not required pursuant to federal regulations (40 CFR 131.12). Discharges in conformance with the terms and conditions of this Order are also consistent with State antidegradation policy (State Water Resources Control Board Resolution No. 68-16) and will not result in any adverse impacts to the present or potential beneficial uses of the receiving waters.

27. The requirements contained in this Order are necessary to implement the Basin Plan.

28. This general permit regulates discharges (as listed in Finding No. 6., above) to surface waters. Entity(ies)/individual(s) proposing groundwater discharges are hereinafter referred to as "*discharger*" and are subject to the terms and conditions of this Order.

29. This Order regulates the discharge into surface waters of wastewater that meets the requirements of this Order. It does not preempt or supersede the authority of municipalities, flood control agencies, or other local agencies to prohibit, restrict, or control discharges of waste to storm drain systems or other watercourses subject to their jurisdiction.

30. For coverage under this general permit, a discharger is required to submit a completed Notice of Intent Form (see Attachment "B" of this Order) together with other information required in Section H. "APPLICATION REQUIREMENTS," and to receive approval from the Executive Officer. If the proposed discharge meets the requirements of this general permit, the Executive Officer will provide the discharger with a written authorization to initiate the discharge. If not, an individual NPDES permit will be developed for consideration by the Regional Board.

31. Any discharger proposing groundwater-related discharges and/or de minimus discharges at multiple locations within the San Diego Creek/Newport Bay Watershed may be covered under one discharge authorization letter on a case by case basis, subject to the approval of the Executive Officer.

32. The Executive Officer of the Regional Board or the Regional Administrator of the EPA may require any person authorized to discharge waste by this general permit to subsequently apply for and obtain an individual NPDES permit. Any interested person may petition the Executive Officer or the Regional Administrator to take action in accordance with this finding. Cases where an individual NPDES permit may be required include the following:

    a. The discharger is not in compliance with the conditions of this Order or the discharge authorization letter from the Executive Officer;

    b. A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;

    c. Effluent limitation guidelines are promulgated for point sources covered by the general NPDES permit;

    d. Changes to water quality control plan containing requirements applicable to such point sources are approved;

    e. The requirements of 40 CFR 122.28 (a) are not met; or

    f. The discharge may adversely affect the water quality objectives of the receiving water.

33. The Regional Board recognizes the need to consider any unique factors relating to a discharger. In order to consider any unique factors applicable to a particular discharger or discharge, it may be necessary for the discharger to apply for an individual NPDES permit in accordance with Section 13376 of the California Water Code.

34. In accordance with California Water Code Section 13389, the issuance of waste discharge requirements for groundwater discharges and *de minimus* discharges identified in Finding 6. is exempt from those provisions of the California Environmental Quality Act contained in Chapter 3 (Commencing with Section 21100), Division 13 of the Public Resources Code.

35. The Regional Board has notified interested agencies and persons of its intent to issue general waste discharge requirements for short-term groundwater-related discharges and *de minimus* discharges in the San Diego Creek/Newport Bay watershed, and has provided them with an opportunity to submit their written views and recommendations.

36. The Regional Board, in a public meeting, heard and considered all comments pertaining to general waste discharge requirements for groundwater discharges within the San Diego Creek/Newport Bay Watershed.

IT IS HEREBY ORDERED that dischargers, their agents, successors, and assigns, who are discharging the types of wastes listed in Findings No. 6, above, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act as amended and regulations and guidelines adopted thereunder, shall comply with the following:

A. DISCHARGE SPECIFICATIONS

1. For all wastewater discharges resulting from activities described in Finding 6., the wastewater shall not contain constituent concentrations in excess of the following limits:

Constituents	Maximum Concentration
Oil and Grease	15 mg/l
Sulfides	0.4 mg/l
Total Suspended Solids[5]	75 mg/l
Total Residual Chlorine [5, 6]	0.1 mg/l
Total Petroleum Hydrocarbons	100 µg/l (ppb)

2. Wastewater discharges resulting from activities described in Finding 6.a. shall not contain constituent concentrations in excess of the limits specified in the following tables. These limits apply if the discharger does not implement a program or programs approved by the Executive Officer to offset discharges in excess of the effluent limits (see Provisions D. 9, 10 and 13, below):

DISCHARGES TO REACH 1 OF SAN DIEGO CREEK AND TRIBUTARIES THERETO		
Constituent	Maximum Daily Concentration Limit	Average Monthly Concentration Limit
Total Nitrogen	--	13 mg/l (see also A.3., below)
Total Recoverable Selenium (see Provisions D.9. & 10.)	8 (µg/l)	4 (µg/l)

DISCHARGES TO REACH 2 OF SAN DIEGO CREEK AND TRIBUTARIES THERETO		
Constituent	Maximum Daily Concentration Limit	Average Monthly Concentration Limit
Total Nitrogen	--	5 mg/l (see also A.3., below)
Total Recoverable Selenium (see Provisions D.9. & 10.)	8 (µg/l)	4 (µg/l)

5 *Not applicable if all wastewater will percolate prior to reaching any receiving water.*

6 *Compliance shall be determined at a point before wastewater mixes with any receiving water.*

DIRECT DISCHARGES TO UPPER AND LOWER NEWPORT BAY		
Constituents	Maximum daily Concentration Limit	Average Monthly Concentration Limit
Total Recoverable Selenium (see Provisions D.9. & 10.)	116 (µg/l)	58 (µg/l)

3. When the quality of groundwater proposed for discharge under the terms and conditions of this Order exceeds 1 mg/L Total Inorganic Nitrogen (TIN), the average monthly mass of total nitrogen (TN) discharges shall not be greater than 50% of the mass of TN in the extracted groundwater. Whichever is more stringent of either the reduction in TN mass or TN concentration limit shown in Discharge Specification A.2. will be the limit (see Provisions D.12. & D.13.). This mass limitation will be met if the discharger implements a program approved by the Executive Officer to offset TN discharges in excess of the mass limitation (see Provision D. 13).

4. The pH of the discharge shall be within 6.5 and 8.5 pH units.

5. There shall be no visible oil and grease in the discharge.

B. RECEIVING WATER LIMITATIONS

1. The discharge of wastes shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Board or the State Board, as required by the Federal CWA and regulations adopted thereunder.

2. The discharge shall not cause any of the following:

   a. The undesirable discoloration of the receiving waters.

   b. The presence of objectionable odor in the receiving water.

   c. The presence of visible oil, grease scum, floating or suspended material or foam in the receiving waters.

   d. The deposition of objectionable deposits along the banks or the bottom of the stream channel.

   e. The depletion of the dissolved oxygen concentration below 5.0 mg/l in the receiving water. If the ambient dissolved oxygen concentration is less than 5.0 mg/l, the discharge shall not cause a further depression.

   f. An increase in the temperature of the receiving waters above 90°F (32°C), which normally occurs during the period of June through October, nor above 78°F (26°C) during the rest of the year.

   g. Change the ambient pH levels more than 0.5 pH units.

h. The concentration of pollutants in the water column, sediments, or biota to adversely affect the beneficial uses of the receiving waters.

i. The bioaccumulation of chemicals in aquatic resources to levels which are harmful to human health.

C. PROHIBITIONS

1. The discharge of oil, trash, industrial waste sludge, or other solids directly to the surface waters in this region or in any manner that will ultimately affect surface waters in this region is prohibited.

2. The discharge of any substances in concentrations toxic to animal or plant life is prohibited.

3. Odors, vectors, and other nuisances of waste origin are prohibited beyond the limits of each discharger's facility.

4. Unless approved by the Executive Officer, the addition of chemicals to the discharge is prohibited.

D. PROVISIONS

1. This Order shall become effective on the date of adoption. This Order shall also serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the CWA, or amendments thereto, that shall become effective 10 days after the date of adoption, provided the Regional Administrator of the EPA has no objection. If the Regional Administrator objects to its issuance, this Order shall not serve as an NPDES permit until such objection is withdrawn.

2. Neither the treatment nor the discharge of waste shall create, or threaten to create, a nuisance or pollution as defined by Section 13050 of the California Water Code.

3. This Order expires on August 1, 2009. However, coverage under the permit shall continue in force and effect until a new Order is issued for those dischargers who submit a renewal application more than 180 days before the August 1, 2009 expiration date. For those dischargers who do not submit a renewal application more than 180 days before the August 1, 2009 expiration date, discharges of wastewater under this Order shall be terminated by August 1, 2009.

4. Upon adoption of this Order, dischargers within the Newport Bay Watershed that are currently covered under Order No. 98-67 shall cease all discharges unless a notice of intent to discharge under the renewed Order is submitted within 30 days of the effective date of the new Order.

5. The Executive Officer shall determine whether the proposed discharge is eligible for coverage under this general permit, after which, the Executive Officer may;

   a. Authorize the proposed discharge by transmitting a "Discharge Authorization Letter" to the discharge proponent (now an "authorized discharger") authorizing the initiation of the discharge under the conditions of this Order and any other conditions consistent with this Order which are necessary to protect the beneficial uses of the receiving waters; or,

   b. Require the discharge proponent to obtain an individual NPDES permit prior to any discharge to surface waters within the San Diego Creek/Newport Bay Watershed.

6. The discharge authorization letter from the Executive Officer shall specify any conditions necessary to protect the beneficial uses of the receiving waters and shall specify the Self-Monitoring Program for the proposed discharge in accordance with this Order. The discharge authorization letter may be terminated or revised by the Executive Officer at any time.

7. The Executive Officer is authorized to issue a single discharge authorization letter to:

   a. A discharger proposing unknown future short-term discharges from activities involving groundwater extraction and discharge (described in Finding 6.a.) at multiple locations within the San Diego Creek/Newport Bay Watershed, provided that the discharger shall submit for each new location not previously reported, the information required in Section H.2.b. through H.2.d at least 60 days before the start of a new discharge from each location. In the case of new short-term groundwater-related discharges for which nitrogen and/or selenium offsets are required, no discharge shall commence until requisite nitrogen and/or selenium offset plans are approved by the Executive Officer.

   b. A discharger proposing unknown future de minimus discharges (described in Finding 6.b.) at multiple locations within the San Diego Creek/Newport Bay Watershed, provided that the general nature of the discharges and the general locations are reported and included in the application to discharge wastes under this general permit and that at least five days prior to each discharge, more detailed information regarding each discharge is reported.

8. The discharger shall comply with all requirements of this Order and the terms, conditions and limitations of the discharge authorization letter.

9. For existing dischargers who have coverage under Order No. 98-67 for short-term groundwater-related discharges within the San Diego Creek/Newport Bay watershed, and for existing individual dischargers who wish to obtain coverage under this general permit, when the results of selenium analysis required to be submitted as part of the Notice of Intent (see Application Requirements H.1., below) demonstrate non-compliance with the effluent limitations for selenium specified in this Order (Discharge Specification A.2.), the discharger(s) shall:

   a. Also submit with the Notice of Intent a demonstration that it is not reasonably feasible to reduce or eliminate the discharge;

   b. Within 120 days of discharge authorization by the Executive Officer[7], submit for approval a plan and schedule to offset selenium discharges in excess of those allowed pursuant to the effluent limitations of this Order The plan/ schedule is to reflect the shortest practicable time necessary to provide the offset. In no case shall the schedule exceed five years from the date of adoption of this Order. This plan shall address offset of selenium discharges that take place while the offset plan is developed and approved;

   c. Collect data on flow and selenium quality to assure that ongoing selenium discharges are properly accounted for and offset pending development, approval and implementation of the offset plan;

   d. Implement the offset plan upon approval by the Executive Officer; and

   e. Acknowledge explicitly, as part of the Notice of Intent, that no notice of termination will be issued until such time as any requisite selenium offset is satisfactorily completed.

10. For new short-term groundwater-related discharges within the San Diego Creek/Newport Bay watershed, if the results of selenium analysis required to be submitted as part of the Notice of Intent (see Application Requirements H.2., below) demonstrate that compliance with the effluent limitations for selenium specified in this Order (Discharge Specification A.2., above) cannot be achieved, the discharger shall:

   a. Also submit with the Notice of Intent a demonstration that the discharge to surface waters cannot reasonably be avoided or minimized;

   b. Also submit a proposed plan and schedule to offset selenium discharges in excess of those allowed pursuant to the effluent limitations of this Order. The plan/schedule is to reflect the shortest practicable time necessary to provide the offset. In no case shall the schedule exceed five years from the date of adoption of this Order;

   c. Implement the plan/schedule upon approval by the Executive Officer. No discharge shall commence until the offset plan is approved by the Executive Officer.

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[7] *The issuance by the Executive Officer of authorization to discharge under the terms and conditions of this Order is contingent on the satisfactory demonstration that termination/reduction of the discharge is not reasonably feasible.*

d. Acknowledge explicitly, as part of the Notice of Intent, that no notice of termination will be issued and that compliance with this Order will continue to be required and enforced until such time as the offset is satisfactorily completed.

11. Revisions to approved selenium offset programs that have not been fully implemented may be made at the discretion of the Executive Officer in response to revisions to this Order to address revised selenium criteria and/or approved revisions to the selenium TMDL for the San Diego Creek/Newport Bay watershed.

12. The monthly mass emission rate for total nitrogen shall be determined by using the following formula:

$$Mass\ (lbs/month) = 8.34 \times Q \times C$$

Where:

Q = total flow discharged within the month in million gallons.

C = the sum of all measurements for the parameter within the month (in milligrams per liter) divided by the total number of samples.

13. If immediate compliance cannot be achieved with the 50% total nitrogen mass reduction requirement specified in Discharge Specification A.3. or with the applicable total nitrogen limitations specified in Discharge Specification A.2., whichever is more stringent, dischargers shall submit plans and schedules to provide total nitrogen offsets in accordance with the following:

a. For existing dischargers who have coverage under Order No. 98-67 for short-term groundwater-related discharges within the San Diego Creek/Newport Bay watershed, and for existing individual short-term groundwater-related dischargers who wish to obtain coverage under this general permit, the discharger shall:

(1) Within 30 days of issuance of discharge authorization by the Executive Officer, submit for approval a plan and schedule to offset total nitrogen discharges that exceed those discharges that would be allowed had the 50% reduction required in Discharge Specification A.3. or compliance with the applicable nitrogen limits specified in Discharge Specification A. 2., whichever is more stringent, been achieved. The schedule shall reflect the shortest practicable time necessary to accomplish the offset but in no case exceed January 1, 2007.

(2) Implement the offset plan and schedule upon approval by the Executive Officer.

(3) Acknowledge as part of the Notice of Intent that no Notice of Termination will be issued, and compliance with the terms and conditions of this general permit will continue to be required and enforced, until this offset is satisfactorily completed.

b. For new short-term groundwater-related discharges within the San Diego Creek/Newport Bay watershed, the discharger shall:

(1) Submit with the Notice of Intent, a plan and schedule to offset total nitrogen discharges that exceed those discharges that would be allowed if the 50% reduction required in Discharge Specification A.3. or compliance with the applicable nitrogen limits specified in Discharge Specification A. 2., whichever is more stringent, was achieved. The schedule shall reflect the shortest practicable time necessary to accomplish the offset but in no case exceed January 1, 2007.

(2) Implement the offset plan upon approval by the Executive Officer.

(3) Not commence any discharge prior to the approval of the offset plan by the Executive Officer.

(4) Acknowledge as part of the Notice of Intent that no Notice of Termination will be issued, and compliance with the terms and conditions of this general permit will continue to be required and enforced, until this offset is satisfactorily completed.

14. In conformance with Provisions 9, 10 and 13, as applicable, the Executive Officer shall prescribe an appropriate monitoring and reporting program to demonstrate that implementation of the approved offset results in no net selenium and/or total nitrogen loading to surface waters.

15. The discharger shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment.

16. The discharger shall take all reasonable steps to minimize any adverse impact to receiving waters resulting from noncompliance with any effluent limitations specified in this Order, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncompliant discharge.

17. The discharger shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement.

18. This Order does not convey any property rights of any sort, or any exclusive privilege.

19. This Order is not transferable to any person except after notice to and approval by the Regional Board.

20. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from his liabilities under federal, state, or local laws, nor guarantee the discharger a capacity right in the receiving waters.

21. The provisions of this Order are severable, and if any provision of this Order, or the application of any provisions of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order shall not be affected thereby.

22. Any violation of this Order constitutes a violation of the CWA, its regulations, and the California Water Code, and is grounds for enforcement action and/or termination of the authorization to discharge.

23. The discharger shall, at all times, properly operate and maintain[8] all facilities and systems of treatment (and related appurtenances) and control which are installed or used by the discharger to achieve compliance with this Order and the conditions of the authorization letter(s) from the Executive Officer. Proper operation and maintenance shall include the following:

    a. Effective performance, adequate funding, adequate operator staffing and training and adequate laboratory and process controls and appropriate quality assurance procedures.

    b. Regular maintenance and inspection of all systems.

    c. Maintenance of records of the inspection results that shall be made available to the Regional Board whenever required and demanded.

24. An Operation and Maintenance (O&M) Manual shall be developed prior to the initiation of the discharge and shall be readily accessible to site operating personnel. The O&M Manual shall include the following:

    a. Detailed description of safe and effective operation and maintenance of treatment processes, process control instrumentation and equipment.

    b. Process and equipment inspection and maintenance schedules.

    c. Describe preventive (fail-safe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events.

    d. Identification and description of the possible sources of accidental loss, bypass of untreated or partially treated wastes, and polluted drainage including power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes and possible spills.

25. All treatment facility startup and operation instruction manuals shall be maintained and available to operating personnel at the site where treatment is being conducted.

26. The Regional Board, EPA, and other authorized representatives shall be allowed:

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8 *Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls and appropriate quality assurance procedures.*

a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;

b. Access to copy any records that are kept under the conditions of the order;

c. To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and

d. To photograph, sample and monitor for the purpose of assuring compliance with this Order, or as otherwise authorized by the CWA.

E. PERMIT REOPENING, REVISION, REVOCATION, AND RE-ISSUANCE

1. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal CWA, or amendments thereto, the Board will revise and modify this Order in accordance with such standards.

2. This Order may be reopened to address any changes in State or federal plans, policies or regulations that would affect the quality requirements for the discharges.

3. Any permit noncompliance constitutes a violation of the CWA and the California Water Code and is grounds for enforcement action; for permit or authorization letter termination, revocation and reissuance, or modification; the issuance of an individual permit; or for denial of a renewal application.

4. This Order may be modified by the Regional Board prior to the expiration date to include effluent or receiving water limitations for toxic constituents determined to be present in significant amounts in the discharge through the comprehensive monitoring program included as part of this Order.

5. This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by a discharger for modification, revocation and reissuance, or termination of this Order or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

F. PENALTIES

1. The CWA provides that any person who violates a provision implementing sections 301, 302, 306, 307, or 308 of the CWA is subject to a civil penalty not to exceed $10,000 per day of such violation. Any person who willfully or negligently violates provisions implementing these sections of the CWA is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than 1 year, or both.

2. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

3. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both.

4. The California Water Code provides that any person who violates a waste discharge requirement or a provision of the California Water Code is subject to civil penalties of up to $5,000 per day, $10,000 per day, or $25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to $10 per gallon per day, or $20 per gallon per day of violation; or some combination thereof, depending on the violation, or upon the combination of violations.

G. REQUIRED REPORTS AND NOTICES

1. Reporting Provisions:

   a. All applications, reports, or information submitted to the Regional Board shall be signed and certified in accordance with 40 CFR 122.22.

   b. The discharger shall furnish, within a reasonable time, any information the Regional Board or EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The discharger shall also furnish to the Regional Board, upon request, copies of records required to be kept by this Order.

   c. Except for data determined to be confidential under Section 308 of the CWA, all reports prepared in accordance with the terms of this Order shall be available for public inspection at the offices of the Regional Water Quality Control Board and the Regional Administrator of EPA. As required by the CWA, effluent data shall not be considered confidential. Knowingly making any false statements on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the Act and Section 13387 of the California Water Code.

2. Within thirty (30) days of issuance of discharge authorization under this Order, discharger(s) within the San Diego Creek/Newport Bay watershed shall submit a plan for approval by the Regional Board's Executive Officer that identifies the method(s) and schedule by which the discharger(s) proposes to achieve a 50% reduction in the total nitrogen mass of their discharges. The schedule is to reflect the shortest practicable time necessary to achieve the 50% reduction. The plan shall also include a schedule and a discussion for achieving compliance with the selenium final effluent limit.

3. The discharger shall file with the Board a report of waste discharge at least 120 days before making any material change or proposed change in the character, location, volume, treatment or disposal methods of the discharge.

4. The discharger shall give advance notice to the Regional Board of any planned changes in the permitted facility or activity that may result in noncompliance with these waste discharge requirements.

5. In the event of any change in control or ownership of land or waste discharge facilities currently owned or controlled by the discharger, the discharger shall notify the succeeding owner or operator of the existence of their authorization to discharge wastewater under this general permit by letter, a copy of which together with the signed agreement between previous owner and the new owner accepting responsibility and liability for complying with this general permit shall be forwarded to the Executive Officer.

6. Upon completion of the project, the discharger shall notify the Executive Officer of the Regional Board in writing about cessation of the discharge and shall request for termination of coverage under this general permit.

H. APPLICATION REQUIREMENTS

1. Dischargers already covered under Order No. 98-67 and those dischargers under individual permits who wish to be and believe they can and should be covered under this renewed general permit shall submit a completed Notice of Intent (see Attachment "B" of Order No. R8-2004-0021) within 30 days of adoption of this Order. The Notice of Intent shall be accompanied by analysis of the wastewater for selenium at analytical detection levels sufficient to assess compliance with the selenium effluent limitations in this Order. If the results of the analysis demonstrate that compliance with the selenium limitations cannot be achieved, the discharger shall comply with the requirements specified in Provision D.9., above. The Notice of Intent shall also be accompanied by analysis of the wastewater for total nitrogen.

   Those dischargers who want to request a modification to the Template Monitoring and Reporting Program shall specifically state the modification being requested and shall submit information/justification supporting their request. The Executive Officer may also require the discharger to submit additional information about any recent change in ownership of facility, changes in the character and treatment of the discharges and any other relevant information that will update facility information that are on the Regional Board files.

2. **FOR A NEW DISCHARGER**[9]: At least 60 days before the start of a new discharge, the discharger shall submit an application and obtain the authorization letter from the Executive Officer. The application shall consist of the first annual fee and following information:

   a. Notice of Intent to be covered under this general permit.

   b. For projects involving well development, well purging and groundwater extraction, a site characterization study report defining the proximity of the extraction well to known contaminated sites, the presence of contaminated groundwater onsite, contaminants and their properties, and a three dimensional assessment of the extent and concentration of contaminants in the subsurface. The study report shall include a description of the geologic and hydrologic factors that control the migration of the contaminants. It shall also include a list of known or suspected leaking underground tanks and other facilities or operations that have or may have impacted the quality of the underlying groundwater within 200 feet of the site.

   c. A report that shall include the following:

      1) Characterization of the proposed wastewater discharge (for discharges identified in Finding 6.a., the characterization of the groundwater shall include total arsenic, total recoverable cadmium, total chromium, total recoverable copper, total recoverable lead, total recoverable mercury, total recoverable nickel, total recoverable selenium, total recoverable zinc, dissolved oxygen (DO), hardness, sulfate, chloride, total nitrogen, electrical conductivity and total dissolved solids. The selenium analysis used shall assure analytical detection levels sufficient to assess compliance with the effluent limitations of this Order.) If the results of this analysis demonstrate that compliance with the selenium limitations in this Order cannot be achieved, the discharger shall comply with the requirements specified in Provision D.10., above;

      2) The name of the receiving water;

      3) The estimated average and maximum daily flow rates;

      4) The frequency and duration of the discharge;

      5) A description of the proposed treatment system (if appropriate); and

      6) A map showing the path from the point of initial discharge to the ultimate location of discharge.

   d. Any other information deemed necessary by the Executive Officer.

---

[9] *New discharger is an entity/individual who is not currently authorized to discharge waste under this general permit and who is proposing groundwater discharges identified in Finding 6., to be covered under this general permit.*

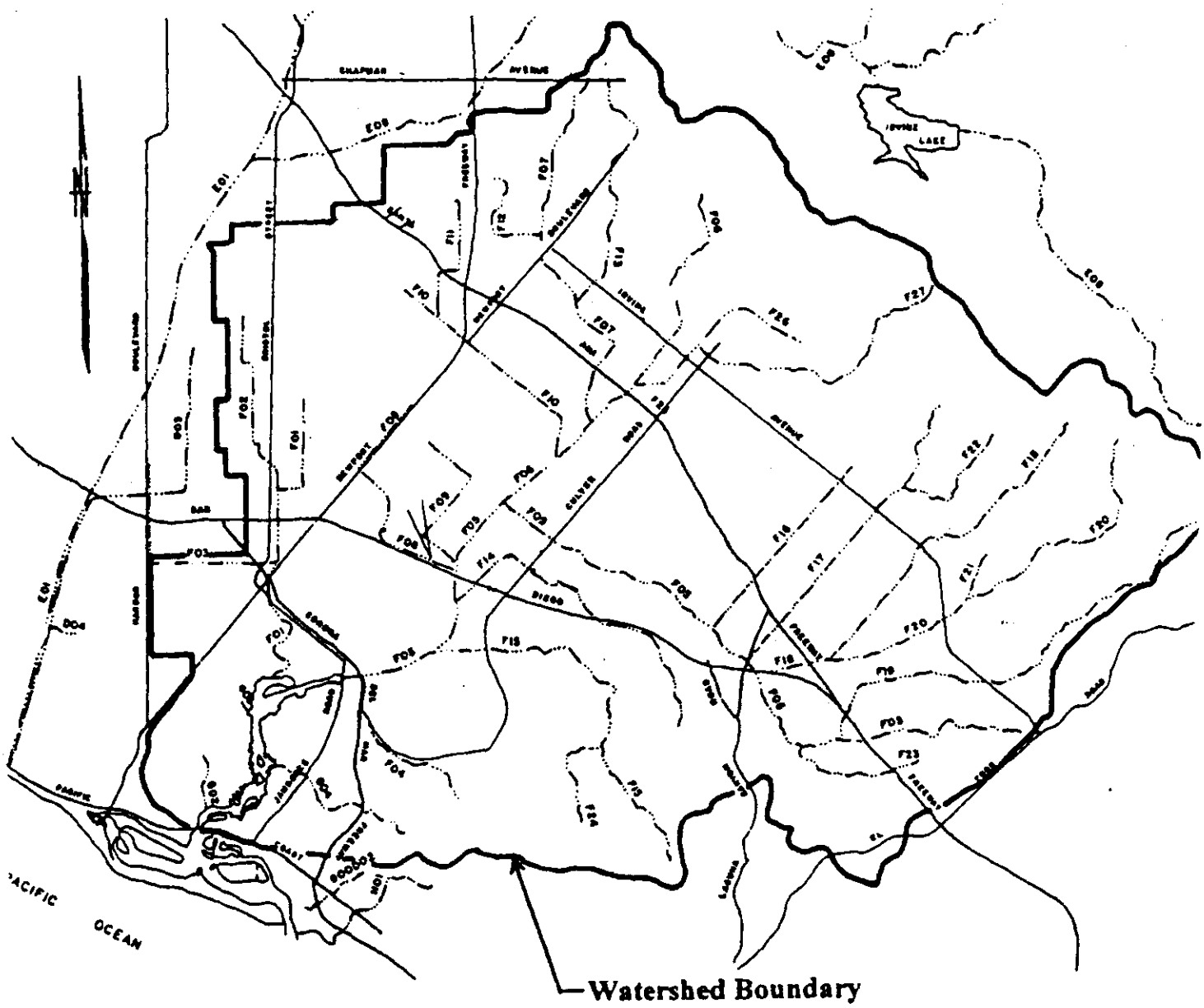
I, Gerard J. Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on August 13, 2004.

_____

Gerard J. Thibeault
Executive Officer

Attachment "A"

San Diego Creek/Newport Bay
Watershed Map



LEGEND:

D03 - GREENVILLE BANNING CHANNEL
D04 - FAIRVIEW CHANNEL
E01 - SANTA ANA RIVER
E08 - SANTIAGO CREEK
F01 - SANTA ANA DELHI CHANNEL
F02 - SANTA ANA GARDENS CHANNEL
F03 - PAULARINO CHANNEL
F04 - BONITA CHANNEL
F05 - SAN DIEGO CREEK CHANNEL
F06 - PETERS CANYON CHANNEL
F07 - EL MODENA-IRVINE CHANNEL
F08 - LANE CHANNEL
F09 - BARRANCA CHANNEL
F10 - SANTA ANA-SANTA FE CHANNEL
F11 - SOUTHWEST TUSTIN CHANNEL
F12 - NORTH TUSTIN CHANNEL
F13 - REDHILL CHANNEL
F14 - SAN JOAQUIN CHANNEL
F15 - SAND CANYON CHANNEL
F17 - BEE CANYON CHANNEL
F18 - AGUA CHINON CHANNEL
F19 - SERRANO CREEK CHANNEL
F20 - BORREGO CANYON CHANNEL
F23 - CANADA CHANNEL
F25 - CENTRAL IRVINE CHANNEL
F26 - RATTLESNAKE CANYON CHANNEL
F27 - HICKS CANYON CHANNEL
G00D02 - HARBOR VIEW DAM
G02 - EAST COSTA MESA CHANNEL
G03 - SANTA ISABELA CHANNEL
G04 - BIG CANYON WASH

Attachment "B"

California Regional Water Quality Control Board
Santa Ana Region

NOTICE OF INTENT

TO COMPLY WITH THE TERMS AND CONDITIONS OF THE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SHORT-TERM GROUNDWATER-RELATED DISCHARGES AND DE MINIMUS WASTEWATER DISCHARGES TO SURFACE WATERS WITHIN THE SAN DIEGO CREEK/NEWPORT BAY WATERSHED
(Order No. R8-2004-0021, NPDES No. CAG998002)

I. PERMITTEE (*Person/Agency Responsible for the Discharge*)

Agency/Company Name:_____

Address:_____

Street *City* *State* *ZIP*

Contact Person:_____ Phone:_(_____)_____

II. FACILITY

Name:_____

Location:_____

Street *City* *State* *ZIP*

Contact Person:_____ Phone:_(_____)_____

a. Projected Flow Rate (*gpd*):_____; b. Receiving Water (*identify*):_____

III. BILLING INFORMATION (*Where annual fee invoices should be sent*)

Agency/Company Name:_____

Address:_____

Street *City* *State* *ZIP*

Contact Person:_____; Phone:_(_____)_____

IV. INDICATE EXISTING PERMIT NUMBER: (*if applicable*)

a. Individual permit Order No. _____ NPDES No. _____
b. General Permit Order No. 98-67_____
c. Others (specify) _____

V. NOTICE OF TERMINATION:

I acknowledge that no notice of Termination will be filed and that compliance with the terms and conditions of this Order if and as amended, will be required and enforced until such time as requisite total nitrogen and selenium offsets that pertain to the discharge are satisfactorily completed.

VI. CERTIFICATION:

I certify under penalty of law that I am an authorized representative of the permittee and that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the permittee will comply with the terms and conditions stipulated in ***Order No. R8-2004-0021*** *including the monitoring and reporting program issued by the Executive Officer of the Regional Board.*

Name and Official Title:_____
(type or print)

Signature: _____ Date: _____

Remarks: *If changes to facility ownership and/or treatment processes were made after the issuance of the existing permit, please provide a description of such changes on another sheet and submit it with this Notice of Intent. The person who signs Section VI-Certification shall meet the requirements of 40 CFR 122.22.*

California Regional Water Quality Control Board
Santa Ana Region

GENERAL WASTE DISCHARGE REQUIREMENTS
FOR SHORT-TERM GROUNDWATER-RELATED DISCHARGES AND
DE MINIMUS WASTEWATER DISCHARGES TO SURFACE WATERS
WITHIN THE SAN DIEGO CREEK/NEWPORT BAY WATERSHED

Template Monitoring and Reporting Program No. R8-2004-0021
NPDES No. CAG998002

A. MONITORING GUIDELINES

1. Monitoring shall be in accordance with the following: All sampling and sample preservation shall be in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association).

2. All laboratory analyses shall be performed in accordance with test procedures under 40 CFR 136 (revised as of May 14, 1999) *"Guidelines Establishing Test Procedures for the Analysis of Pollutants,"* promulgated by the United States Environmental Protection Agency (EPA), unless otherwise specified in this monitoring and reporting program (M&RP). In addition, the Regional Board and/or EPA, at their discretion, may specify test methods that are more sensitive than those specified in 40 CFR 136. Unless otherwise specified herein, organic pollutants shall be analyzed using EPA method 8260, as appropriate.

3. Chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services or EPA or at laboratories approved by the Executive Officer of the Regional Board.

4. All analytical data shall be reported with method detection limits (MDLs) and with identification of either minimum levels, practical quantitation levels (PQLs) or limits of quantitation (LOQs).

5. Whenever the discharger monitors any pollutant more frequently than is required by this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharge monitoring report specified by the Executive Officer.

6. The discharger shall deliver a copy of each monitoring report in the appropriate format to:

California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3348

7. The discharger shall assure that records of all monitoring information are maintained and accessible for a period of at least five years from the date of the sample, report, or application. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or by the request of the Board at any time. Records of monitoring information shall include:

   a. The date, exact place, and time of sampling or measurements;

   b. The individual(s) who performed the sampling, and/or measurements;

   c. The date(s) analyses were performed;

   d. The individual(s) who performed the analyses;

   e. The analytical techniques or methods used;

   f. All sampling and analytical results;

   g. All monitoring equipment calibration and maintenance records;

   h. All original strip charts from continuous monitoring devices;

   i. All data used to complete the application for this Order; and,

   j. Copies of all reports required by this Order.

8. A "grab" sample is defined as any individual sample collected in less than 15 minutes.

9. Weekly samples shall be collected on any representative day of each week.

10. Monthly samples shall be collected on a representative day of the month.

11. Quarterly samples shall be collected in January, April, July, and October.

12. Semi-Annual samples shall be collected at the initiation of the project for the first sample and during January and July thereafter.

13. Annual samples shall be collected on the month the discharge authorization letter was issued.

B. EFFLUENT MONITORING

1. The discharger shall visually monitor and record all flows and the duration of all waste discharges.

2. A sampling station shall be established at the discharge point. This station shall be located where representative samples can be obtained before the discharge mixes with the receiving waters. The following shall constitute the effluent monitoring program:

a. For all groundwater related wastewater discharges resulting from activities described in Finding 6.a., of the Order:

Constituent	Type of Sample	Units	Minimum Frequency of Sampling & Analysis
Flow	Flowmeter	GPD	Daily
Total Suspended Solids[1]	Grab	mg/l	During the first 30 minutes of each discharge and as directed by the Executive Officer, thereafter
Sulfide	"	"	"
Oil and Grease	"	"	"
Coliform Organisms [2]	"	MPN	"
Methylene Blue Activated Substances (MBAS) [3]	"	mg/l	"
Total Hardness	"	"	"
Total Nitrogen	"	"	"
Total Petroleum Hydrocarbons [3]	"	µg/l	"
Total Arsenic	"	µg/l	See B.3., below
Total Recoverable Selenium	"	"	"
Total Recoverable Cadmium	"	"	"
Total Chromium	"	"	"
Total Recoverable & Dissolved Copper	"	"	"
Total Recoverable & Dissolved Lead	"	"	"
Total Recoverable Nickel	"	"	"
Total Recoverable Mercury	"	"	"
Total Recoverable & Dissolved Zinc	"	"	"
Total PCBs	"	"	"
Total DDTs	"	"	"
Total Chlordane	"	"	"
Dieldrin	"	µg/l	"
pH	"	Unit	"
Temperature	"	^0C	"
Dissolved Oxygen	Grab	mg/l	"
Total Alkalinity	"	mg $CaCO_3$/l	Annually
Electrical Conductance	"	µmhos/cm	"

1 *Not applicable if all wastewater will percolate prior to reaching receiving waters.*

2 *Only for groundwater dewatering projects in the vicinity of active sewer lines.*

3 *Only groundwater dewatering projects in an area where gasoline leaks, spills, or contamination has occurred, or where active groundwater remediation projects are occurring (e.g. gasoline service station leaking underground storage tank), or when gasoline/diesel powered engines are used in the dewatering operation.*

Constituent	Type of Sample	Units	Minimum Frequency of Sampling & Analysis
Chloride	Grab	mg/l	Annually
Sulfate	"	"	"
Total Organic Carbon	"	"	"
Total Dissolved Solids	"	"	"
Toxaphene	"	"	"

b. For wastewater discharges resulting from activities described in Finding 6.b. of the Order:

Constituent	Type of Sample	Units	Minimum Frequency of Sampling & Analysis
Flow	Flowmeter	GPD	Daily
Total Suspended Solids[1]	Grab	mg/l	During the first 30 minutes of each discharge and as directed by the Executive Officer, thereafter
Total Residual Chlorine[1, 4]	"	"	"
Total Petroleum Hydrocarbons[3]	"	"	"
Oil and Grease	"	"	"

3. Minimum frequency of sampling & analysis:

a. For projects, that discharge wastewater at 1 million gallons per day (mgd) or more, daily grab samples for four consecutive days shall be taken and analyzed individually for the constituent required to be monitored. Subsequent samples shall be taken and analyzed once quarterly, unless directed otherwise by the Regional Board Executive Officer. If the discharge does not last for more than a day, one composite sample taken for the duration of the discharge shall be analyzed;

b. For all other projects discharging wastewater at less than 1 mgd, weekly sampling and analyses shall be conducted for the first month. Subsequent sampling and analyses shall be conducted once quarterly, unless directed otherwise by the Regional Board Executive Officer.

4. Total nitrogen and total recoverable selenium offset monitoring and reporting:

a. The discharger with an approved offset program shall assure that the facility conducting the offset monitors the daily flow and at least once monthly, conduct sampling and testing for total recoverable selenium and total nitrogen. These data shall be recorded on a permanent log.

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4 *Unless it is known, that chlorine is not in the discharge.*

b. Provide documentation necessary to demonstrate that implementation of the offset(s) results in requisite reduction of total nitrogen and selenium as applicable.

c. If no offset occurs during the monitoring period, a letter to that effect shall be submitted in lieu of a monitoring report. The letter shall include a justification for the failure to provide the offset.

C. REPORTING REQUIREMENTS

1. Five days prior to any discharge from locations already reported, the discharger shall notify the Regional Board staff by phone or by a fax letter indicating the date and time of the proposed discharge.

2. Five days prior to any planned discharge[5] from locations not yet reported, the discharger shall notify the Regional Board staff by phone or by a fax letter indicating the following:

   a. Specific type of the proposed wastewater discharge (see listing on Finding 6. of the Order);
   b. The estimated average and maximum daily flow rates;
   c. The frequency and duration of the discharge;
   d. The affected receiving water(s);
   e. A description of the proposed treatment system (if appropriate); and
   f. A description of the path from the point of initial discharge to the ultimate location of discharge (fax a map if possible);

3. Monitoring reports shall be submitted by the 30th day of each month. The monitoring reports shall cover the previous month's monitoring activities and shall include:

   a. The daily flow data;
   b. The depth from which groundwater is extracted as measured from ground surface elevation, including Global Positioning System coordinates for discharge point(s);
   c. A brief description of the type of dewatering activity (e.g. well construction, well purging, dewatering for foundation, etc.);
   d. The results of all laboratory analyses for constituents required to be monitored (see Section B. above);
   e. Calculations of removal rate for total nitrogen, and total suspended solids;
   f. A summary of the discharge activities (when and where discharged occurred, description of type of discharge, etc.) including a report detailing the discharger's compliance or noncompliance with the requirements of the general permit and discharge authorization letter;

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5 *For those unplanned discharges, as much prior notification as possible is required before any discharge is initiated*

g. Total nitrogen and total recoverable selenium offset monitoring report described in B.4., above; and

h. For every item where the requirements of the general permit and discharge authorization letter are not met:

1) A statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time; and

2) A timetable for implementing the proposed actions.

4. If no discharge occurs during the previous monitoring period, a letter to that effect shall be submitted in lieu of a monitoring report.

5. All reports shall be arranged in a tabular format to clearly show compliance or noncompliance with each discharge specification.

6. All reports shall be signed by a responsible officer or duly authorized representative of the discharger and shall be submitted under penalty of perjury.

Ordered by_____

Gerard J. Thibeault
Executive Officer

August 13, 2004

California Regional Water Quality Control Board

Santa Ana Region

Terry Tamminen
Secretary for Environmental Protection

3737 Main Street, Suite 500, Riverside, California 92501-3348
(909) 782-4130 • Fax (909) 781-6288
http://www.swrcb.ca.gov/rwqcb8

Arnold Schwarzenegger
Governor

July 14, 2004

U.S. Environmental Protection Agency, Permits Issuance Section (WTR-5) – Doug Eberhardt
U.S. Army District, Los Angeles, Corps of Engineers - Regulatory Branch
U.S. Fish and Wildlife Service, Carlsbad
State Water Resources Control Board, Office of the Chief Counsel - Jorge Leon
State Water Resources Control Board, Division of Water Quality - James Maughan
State Department of Water Resources, Glendale
State Department of Fish and Game, Long Beach
California Department of Health Services, Santa Ana – Cor Shaeffer
Orange County Health Care Agency - Seth Daugherty
Orange County Resources and Development Management Department - Chris Crompton
Orange County Planning & Development Services Department – Tim Neely
Orange County Water District - Nira Yamachika
South Coast Air Quality Management District – Dr. Barry R. Wallerstein, Executive Officer
Orange County Coastkeeper - Garry Brown
Lawyers for Clean Water C/c San Francisco Baykeeper
Current De Minimus enrollees within the San Diego Creek/Newport Bay Watershed, (attached list)

ISSUANCE OF GENERAL WASTE DISCHARGE REQUIREMENTS FOR SHORT-TERM GROUNDWATER-RELATED DISCHARGES AND DE MINIMUS WASTEWATER DISCHARGES TO SURFACE WATERS WITHIN THE SAN DIEGO CREEK/NEWPORT BAY WATERSHED, ORDER NO. R8-2004-0021, NPDES NO. CAG998002

Ladies and Gentlemen:

Enclosed is a copy of tentative Order No. R8-2004-0021, NPDES No. CAG998002. This Order establishes waste discharge requirements for discharges that pose an insignificant (de minimus) threat to water quality and for short term discharges of extracted groundwater to surface waters within the San Diego Creek/Newport Bay watershed.

This Order was originally scheduled for consideration by the Regional Board on April 30, 2004, but was postponed. The revised Order will be considered by the Regional Board on August 13, 2004. The Board meeting will start at 9 a.m and will be held at the Santa Ana City Council Chambers, 22 Civic Center Plaza, Santa Ana. Although all comments that are provided up to and during the public hearing on this matter will be considered, receipt of comments by July 26, 2004 would be appreciated so that they can be used in the formulation of the final draft requirements that will be transmitted to the Board two weeks prior to the hearing. The final draft requirements may contain changes resulting from comments received from you and others.

To view and/ or download a copy of the final draft requirements, please access our website at *http://www.swrcb.ca.gov/rwqcb8* on or after July 31, 2004.

If you have questions, please contact Jun Martirez at (909) 782-3258 or Jane Qiu at (909) 320-2008.

Sincerely,

for Filomeno J. Martirez Jr.
Joanne E. Schneider
Environmental Program Manager

Enclosures: Tentative Order No. R8-2004-0021, Monitoring and Reporting Requirements, and Fact Sheet

GAIL PICKART/TIM DEUTSCH
NEWPORT BEACH, CITY OF
PO BOX 1768
NEWPORT BEACH, CA 92658-8915

GARY VEEH
TUSTIN, CITY OF
235 MAIN STREET
TUSTIN, CA 92680

WENDALL BRADFORD
FOOTHILL ENG & DEWATERING, INC.
905 E. THIRD STREET
CORONA, CA 92879

ROBERT REITENOUR
OPUS WEST CONST. CORP.-IRVINE
2020 MAIN STREET, SUITE 800
IRVINE, CA 92614

ROBERT TOWNSEND
WASHINGTON MUTUAL BANK, FA
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IRVINE, CA 92614

JASON PAULUS
PAULUS ENGINEERING, INC.
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ANAHEIM, CA 92806

ERNIE BERNARD
ARIZONA PIPELINE COMPANY
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CORONA, CA 92879-6006

LESLIE MANDERSCHEID
CALTRANS – DISTRICT 12
3337 MICHELSON DRIVE, CN3B0
IRVINE, CA 92612-1699

JOHN HILLS
IRVINE RANCH WATER DISTRICT
PO BOX 57000
IRVINE, CA 92619-7000

DALE SCHEFFLER
D.J. SCHEFFLER, INC.
2500 W. POMONA BLVD.
POMONA, CA 91768

PAUL CORN
UNITED STORM WATER, INC.
14000 E. VALLEY BLVD. #B
CITY OF INDUSTRY, CA 91746

JAMES J. LORMAN, JR.
IRVINE COMPANY
550 NEWPORT CENTER DRIVE
NEWPORT BEACH, CA 92660

MIKE LOVING
IRVINE, CITY OF
ONE CIVIC CENTER PLAZA
IRVINE, CA 92623-9575

KURT SNYDER
MAZDA NORTH AMERICA OPERATIONS
7755 IRVINE CENTER DRIVE
IRVINE, CA 92618

CHRIS CROMPTON/ DAVE MARSHALL
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NIRA YAMACHIKA
ORANGE COUNTY WATER DISTRICT
PO BOX 8300
FOUNTAIN VALLEY, CA 92728-8300

ANDREW TAYLOR
SBC SERVICES, INC.
2600 CAMINO RAMON, ROOM 3E000
SAN RAMON, CA 94583